UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,319	08/28/2001	James J. Alwan	AIRFIBE.004A	6272

35690 7590 08/23/2005

MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.
P.O. BOX 398
AUSTIN, TX 78767-0398

EXAMINER	
TRAN, DZUNG D	

ART UNIT	PAPER NUMBER
2638	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/941,319	ALWAN ET AL.	
	Examiner	Art Unit	
	Dzung D. Tran	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34,37-44,46-48,51-60 and 62-78* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-34,37-44,46-48,51-60,62-71 and 74-76* is/are allowed.

6)☒ Claim(s) *72, 73, 77 and 78* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 72, 73, 77 and 78 rejected under 35 U.S.C. 103(a) as being unpatentable over Cato US patent no. 5,229,593.

Regarding claims 72 and 77, Cato discloses in figure 1, a method/apparatus of a communication system comprising:

a first node (e.g. communication terminal A) having a transmitter 12 and a receiver 13 (inherently is a first transceiver) configured to transmit a first beam 15 at a first power level and configured to receive a second beam 15';

a second node (e.g. communication terminal B) having a transmitter 12' and a receiver 13' (inherently is a second transceiver) configured to transmit the second beam 15' at a second power level to the first transceiver and configured to receive the first beam 15 transmitted by the first transceiver;

a microprocessor 11 (same as claimed a first control module) configured to control the first transceiver to maintain a safe exposure level to a blocking object by changing the first power level of the first beam based on the power level of the received second beam (col. 5, lines 25-26, col. 6, lines 50-60); and

a microprocessor 11' (same as claimed a second control module) configured to control the second transceiver to maintain the safe exposure to the blocking object by changing the second power level of the second beam based on the power level of the received first beam (col. 5, lines 25-26, col. 6, lines 50-60).

Cato further discloses pulsing the power of the first beam to limit the radiation exposure of the blocking object to the safe level (col. 6, lines 7-9), transmitting information during the pulsing of the first beam to reestablish communication with the second node (col. 6, lines 45-60).

Cato does not specifically disclose the information is the orientation information. However, Cato discloses the laser output beam 15 can be modulated with **the desired information** to be transmitted (col. 5, lines 9-10).

Therefore, if it is not inherently, it would have been obvious to a person of ordinary skill in the art to modulated the orientation information with the laser output beam 15.

One of ordinary skill in the art would have been motivated to do this in order to correct or align the direction of the light beam. Furthermore, transmitting the orientation information for tracking and pointing is well recognized in the art.

Regarding claims 73 and 78, Cato discloses in figure 1, a method/apparatus of a communication system comprising:

a first node (e.g. communication terminal A) having a transmitter 12 and a receiver 13 (inherently is a first transceiver) configured to transmit a first beam 15 at a first power level and configured to receive a second beam 15';

a second node (e.g. communication terminal B) having a transmitter 12' and a receiver 13' (inherently is a second transceiver) configured to transmit the second beam 15' at a second power level to the first transceiver and configured to receive the first beam 15 transmitted by the first transceiver;

a microprocessor 11 (same as claimed a first control module) configured to control the first transceiver to maintain a safe exposure level to a blocking object by changing the first power level of the first beam based on the power level of the received second beam (col. 5, lines 25-26, col. 6, lines 50-60); and

a microprocessor 11' (same as claimed a second control module) configured to control the second transceiver to maintain the safe exposure to the blocking object by changing the second power level of the second beam based on the power level of the received first beam (col. 5, lines 25-26, col. 6, lines 50-60).

Cato further discloses pulsing the power of the first beam to limit the radiation exposure of the blocking object to the safe level (col. 6, lines 7-9), transmitting information during the pulsing of the first beam to reestablish communication with the second node (col. 6, lines 45-60).

Cato does not specifically disclose the information is the node position information.

However, Cato discloses the laser output beam 15 can be modulated with **the desired information** to be transmitted (col. 5, lines 9-10).

Therefore, if it is not inherently, it would have been obvious to a person of ordinary skill in the art to modulated the node position information with the laser output beam 15.

One of ordinary skill in the art would have been motivated to do this in order to correct or align the direction of the light beam. Furthermore, transmitting the node position information is well recognized in the art in Global Positioning System (GPS).

3. Claims 1-34, 37-44, 46-48, 51-60, 62-71 and 74-76 are allowed.

Response to Arguments

4. Applicant's arguments filed on 05/09/2005 have been fully considered but they are not persuasive.

A Rejection of claims 72, 73, 77 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cato US patent no. 5,229,593.

Applicant argues Cato does not disclose or suggest the transmitted information includes orientation or node position information as recited in claims 72, 73, 77 and 78. However, Cato discloses the laser output beam 15 can be modulated with **the desired information** to be transmitted (col. 5, lines 9-10). Furthermore, transmitting the orientation information or the node position information is well recognized in the art.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dzung Tran
08/19/2005

KENNETH VANDERPUYE
PRIMARY EXAMINER